

Amendments To The Claims

1. **(Currently Amended)** An audio-signal-processing apparatus comprising:
a band-decomposition unit, having a decomposition characteristic, operable to decompose a low frequency component of input-audio-signals into a plurality of frequency components that have different frequency bands based on the decomposition characteristic;
a harmonic-series-generating unit operable to generate a harmonic-tone component based on at least one of the plurality of frequency components; and
a composition unit operable to compound the input-audio-signals and the harmonic-tone component generated by said harmonic-series-generating unit,
wherein said band-decomposition unit is operable to decompose the low frequency component of each of a fundamental tone and harmonic-tones of the fundamental tone initially in a same band such that each belongs to a different frequency band.

2. **(Canceled)**

3. **(Currently Amended)** The audio-signal-processing apparatus of claim 1, wherein ~~the decomposition characteristic~~ each bandwidth of the plurality of frequency components is defined based on a lowest fundamental frequency of ~~a particular musical instruments~~ instrument.

4. **(Currently Amended)** The audio-signal-processing apparatus of claim 1, wherein ~~the decomposition characteristic~~ each bandwidth of the plurality of frequency components is defined based on a low interval limit.

5. **(Original)** The audio-signal-processing apparatus of claim 1, wherein a band width of each of the different frequency bands is from 15Hz to 50Hz.

6. **(Original)** The audio-signal-processing apparatus of claim 1, wherein a band width of each of the different frequency bands is from 15Hz to 30Hz.

7. **(Currently Amended)** The audio-signal-processing apparatus of claim 1, wherein said band-decomposition unit comprises a low-pass filter ~~extracting~~ operable to extract frequency components in a lowest register.

8. **(Currently Amended)** The audio-signal-processing apparatus of claim 1, wherein said band-decomposition unit comprises a band-pass filter having a low cut-off frequency that is lower than a lowest fundamental frequency of ~~a musical instruments~~ instrument.

9. **(Original)** The audio-signal-processing apparatus of claim 1, further comprising a delay device operable to compensate for a processing delay between the harmonic-tone component and the input-audio-signals.

10. **(Original)** The audio-signal-processing apparatus of claim 1, further comprising a gain control device operable to adjust a gain of the input-audio-signals and a gain of the harmonic-tone component generated by said harmonic-series-generating unit.

11. **(Currently Amended)** An audio-signal-processing apparatus comprising:
a sum component output unit operable to receive input-audio-signals of a first channel and input-audio-signals of a second channel and output a sum component of the input-audio-signals of the first channel and the input-audio-signals of the second channel;
a band-decomposition unit, having a decomposition characteristic, operable to decompose the sum component into a plurality of frequency components that have different frequency bands based on the decomposition characteristic;
a harmonic-series-generating unit operable to generate a harmonic-tone component based on at least one of the plurality of frequency components;
a first composition unit operable to compound the input-audio-signals of the first channel and the harmonic-tone component generated by said harmonic-series-generating unit; and
a second composition unit operable to compound the input-audio-signals of the second

channel and the harmonic-tone component generated by said harmonic-series-generating unit,
wherein said band-decomposition unit is operable to decompose the low frequency component of each of a fundamental tone and harmonic-tones of the fundamental tone initially in a same band such that each belongs to a different frequency band.

12. **(Currently Amended)** An audio-signal-processing method comprising:
decomposing a low frequency component of input-audio-signals into a plurality of frequency components that have different frequency bands based on a decomposition characteristic;
generating a harmonic-tone component based on at least one of the plurality of frequency components; and
compounding the input-audio-signals and the generated harmonic-tone component,
wherein said decomposing comprises decomposing the low frequency component of each of a fundamental tone and harmonic-tones of the fundamental tone initially in a same band such that each belongs to a different frequency band.

13. **(Canceled)**

14. **(Currently Amended)** The audio-signal-processing method of claim 12, wherein ~~the decomposition characteristic~~ each bandwidth of the plurality of frequency components is defined based on a lowest fundamental frequency of a particular musical instrument.

15. **(Currently Amended)** The audio-signal-processing method of claim 12, wherein ~~the decomposition characteristic~~ each bandwidth of the plurality of frequency components is defined based on a low interval limit.

16. **(Currently Amended)** The audio-signal-processing method of claim 12, wherein a band width of each of the different frequency bands is from 15Hz to ~~50~~30Hz.

17. **(Original)** The audio-signal-processing method of claim 12, wherein said decomposing comprises decomposing of the low frequency component of the input-audio-signals into the plurality of frequency components that have the different frequency bands based on the decomposition characteristic with ~~uses~~ a low-pass filter operable to extracting ~~extract~~ frequency components in a lowest register.

18. **(Original)** The audio-signal-processing method of claim 12, wherein a band width of each of the different frequency bands is from 15Hz to 50Hz.

19. **(Original)** The audio-signal-processing method of claim 12, further comprising compensating for a processing delay between the generated harmonic-tone component and the input-audio-signals.

20. **(Original)** The audio-signal-processing method of claim 12, further comprising adjusting a gain of the input-audio-signals and a gain of the generated harmonic-tone component.